

REMARKS

I. Preliminary matters.

The claims in this application have been made subject to a restriction requirement pursuant to phone conferences between Applicants' representative and Examiner Madsen on June 2, 2003 and June 4, 2003. In the phone conferences, Applicants elected claims in Group I for further prosecution at this time. Applicants confirmed the election without traverse of claims in Group I (claims 1-11, 14-31, 33-34, and new claim 35) in the Preliminary Amendment dated June 4, 2003.

Claims 7-11, 14-18, 23-24 and 32 have been cancelled, and claims 12 and 13 have been withdrawn as being directed to non-elected subject matter. Accordingly, claims 1-6, 19-22, 25-31, and 33-35 remain under consideration. Claims 1, 2, 4, 21, 22, 25-27, 30, 31, 34, and 35 have been amended.

Claim 1 has been amended to incorporate the ribbed surface limitation from cancelled claim 8, to specify a cup-shaped package element and a lid element, and a seal between the cup-shaped package element and the lid element. Support for this amendment is found in the specification at page 6, lines 5-18, page 7, lines 3-18, and in the Figures, particularly FIGs. 2, 3A, 5A, 10A, and 12.

Claim 2 has been amended to specify that the laminate is selected by its oxygen permeability characteristics, and that the surface area is provided by selecting the number and size of ribs in the ribbed surface of the cup-shaped package element to maintain the constant partial pressure of oxygen within the closed package. Support for this amendment is found in the specification at page 4, lines 10-22, page 5, lines 1-13, and page 6, lines 5-18.

Claim 4 has been conformed with the language of amended claim 1 and clarifies the relative size relationship between the micropores in the cup and in the label material. Support for this amendment is found in the original claim and at page 10, line 24 through page 11, line 16.

Claims 21, 22, and 25 have been amended to conform with changes made in claim 1.

Claim 26 has been amended to recite "package closure *means*" to clarify the antecedent basis in claim 25.

Claim 27 has been amended to recite "package closure *means*" and to change the

dependency to claim 26 to provide proper antecedent basis for "sealable strip."

Claims 30 and 31 have been amended to change the dependency from claim 25 to claim 1 (from which claim 25 depends) and to conform with changes made in claim 1. Support for this amendment is found in original claims 25, 30 and 31.

Claims 34 and 35 have been amended to conform the language of the claims to the changes made in claim 1.

No new matter is added by any of the foregoing claim amendments.

II. Claims 1-3, 21, 25, and 27 Are Not Anticipated by Antoon Jr.

Claims 1-3, 21, 25, and 27 have been rejected as allegedly being anticipated by U.S. Patent No. 5,045,331 (Antoon Jr.). This rejection is unwarranted.

Antoon Jr. discloses a bowl-shaped container including a gas permeable panel to control the level of oxygen and carbon dioxide diffusion into and out of the container. The reference does not teach or suggest the presently claimed method for maintaining a controlled level of oxygen within a closed food package wherein a cup-shaped package element is formed from a laminate of polymeric films having a selected oxygen permeability and having a ribbed surface to provide a sufficient surface area on the closed food package to maintain the partial pressure of oxygen in the package at a specified level. There is no teaching or suggestion in Antoon Jr. to use surface ribbing to control diffusion of oxygen through the container wall.

Furthermore, the reference teaches away from the present invention. At column 4, lines 47-63, the reference teaches that the material of construction of the container is not critical except that the container should be substantially impermeable to air except in the control panel. In contrast, in the presently claimed methods, the laminate materials comprising the food package have selected oxygen permeability and the material chosen for the food package impacts the degree of oxygen permeability.

The applied reference does not teach or suggest all of the limitations of the present claims and teaches away from the claimed invention. Accordingly, Antoon Jr. cannot anticipate claims 1-3, 21, 25, and 27.

III. Claims 1-4, 21, 25-27, 31 and 33 Are Not Anticipated by Jones.

Claims 1-4, 21, 25-27, 31 and 33 have been rejected as allegedly being anticipated by U.S. Patent No. 4,830,863 (Jones). This rejection also is unwarranted.

Jones, like Antoon Jr., discloses a food container wherein a portion of the container comprises a gas permeable substrate (See col. 1, lines 33-49 of Jones). The containers of Jones have a very high permeability lid, and oxygen exchange between the interior and exterior of the container is controlled by resting the lid against materials having differing gas permeability at different points in the food marketing chain (see col. 6, lines 7-44 and Figures 3-5). Thus in Jones, the desired oxygen level in the container is controlled by how the closed container is stored (i.e., lid up - high degree of oxygen exchange, lid down against an impermeable support - low degree of oxygen exchange). Thus, the same container has different levels of oxygen exchange depending on how the container is stored. The method of controlling the oxygen level in a food container taught by Jones is thus entirely different than the methods of the present invention.

The reference does not teach or suggest the presently claimed method for maintaining a controlled level of oxygen within a closed food package wherein a cup-shaped package element is formed from a laminate of polymeric films having a selected oxygen permeability and having a ribbed surface to provide a sufficient surface area on the closed food package to maintain the partial pressure of oxygen in the package at a specified level. The reference does not teach or suggest a cup-shaped package, and rather discloses the use of a tray or bag type container. While Jones does disclose the use of micropores, the reference does not teach or suggest the use of micropores in combination with a ribbed surface to control the oxygen level within a food package as required by claim 4.

Accordingly, since Jones does not teach or suggest all of the elements of the present claims, this rejection should be withdrawn.

IV. Claims 1-3, 22, 25- 27, 31, 33, and 34 Are Not Anticipated by Brady.

Claims 1-3, 22, 25- 27, 31, 33, and 34 have been rejected as allegedly being anticipated by U.S. Patent No. 5,916,615 (Brady). This rejection is unwarranted, as well.

Brady discloses a tray-type container having a non-textured and substantially smooth gas permeable substrate attached to the lower surface of the package to allow air to flow into the packages when disposed in a stack (see Abstract, claims and figures). The container of Brady also includes a *non-permeable* film removably covering a gas permeable film on the lid of the container, such that when the non-permeable film is peeled away, the level of oxygen exchange between the interior and exterior of the container is greatly

increased (see col. 3, lines 50-66, and col. 12, line 49 through col. 13, line 29). Brady does not teach or suggest the presently claimed method for maintaining a controlled level of oxygen within a closed food package wherein a cup-shaped package element is formed from a laminate of polymeric films having a selected oxygen permeability and having a ribbed surface to provide a sufficient surface area on the closed food package to maintain the partial pressure of oxygen in the package at a specified level. In fact, by requiring that the gas permeable substrate be non-textured and substantially smooth, the reference teaches away from the presently claimed ribbed food package. Brady does not teach or suggest the use of ribbing to control the oxygen level in a cup-shaped food package.

Since the Brady does not teach or suggest all of the elements of the claims and teaches away from the invention, this reference cannot anticipate the present claims.

V. Claims 1-4, 19, and 20 Are Not Anticipated by Floyd *et al.*

Claims 1-4, 19, and 20 have been rejected as allegedly being anticipated by U.S. Patent No. 5,908,649 (Floyd *et al.*). This rejection also is unwarranted.

Floyd *et al.* discloses food containers comprising a sealed bag containing a fresh food product, the bag being disposed in contact with a cooling element partially surrounding the bag (see Figures and Abstract). The bag can include a controlled atmosphere and can have gas permeable windows or apertures, such as micropores of specified diameter, to control flow of gasses into and out of the container when perishable food is stored within the container (see col. 10, lines 33-50, col. 11, line 45 through col. 12, line 3, and the figures).

This reference does not teach or suggest a cup-shaped package having a ribbed surface as required by the present claims. The reference does not teach or suggest a method of controlling the atmosphere in a cup-shaped package by using a polymeric laminate having a selected oxygen permeability characteristic and having a ribbed surface to control the oxygen level within the sealed food package, as also required by the present claims. Nor does the reference teach or suggest the use of a combination of ribbed surface and micropores to control the oxygen level within a cup-shaped food package as required by claim 4.

The reference fails to teach or suggest all of the limitations of the claims. Accordingly, Floyd *et al.* cannot anticipate the present claims.

VI. Claims 1, 3, 22, 25-27, 31, and 33 Are Not Anticipated by Krebs *et al.*

Claims 1, 3, 22, 25-27, 31, and 33 have been rejected as allegedly being anticipated

by U.S. Patent No. 6,015,583 (Krebs *et al.*). This rejection is unwarranted and should be withdrawn.

Krebs *et al.* is directed to tray-type food containers comprising a gas non-permeable tray sealed with gas permeable film, and having a gas non-permeable film removably disposed over the permeable film (See col. 4, lines 27-38, and the figures). Krebs *et al.* teach the use of a temporary, removable gas non-permeable film disposed over a conventional gas permeable film to create a package that is initially non-permeable to gasses, but which becomes gas permeable when the non-permeable film is removed from the gas permeable film. The tray portion of the container (which holds the food product) is made of a non-permeable material. (See col. 4, lines 27-48). In contrast, the present claims encompass methods of controlling the oxygen level in a food container using a cup-shaped package to hold the food product, the cup-shaped package being made of a polymeric laminate having selected oxygen permeability characteristics and further including ribs in the surface of the package to provide additional control of the oxygen level in the package by varying the surface area of the package depending on the size and number of ribs in the surface.

Krebs *et al.* does not teach or suggest the presently claimed method for maintaining a controlled level of oxygen within a closed food package wherein a cup-shaped package element is formed from a laminate of polymeric films having a selected oxygen permeability and having a ribbed surface to provide a sufficient surface area on the closed food package to maintain the partial pressure of oxygen in the package at a specified level. The reference does not teach or suggest a cup-shaped package, and rather only teaches a tray-shaped container. Furthermore, the reference does not teach or suggest the use of ribs in the surface of the package, in combination with a polymeric laminate having selected oxygen permeability characteristics, to control the oxygen level within a food package.

Krebs *et al.* does not teach or suggest all of the limitations of the claims. Accordingly, this reference cannot anticipate the present claims.

VII. Claims 1-4 and 22 Are Not Anticipated by Bedrosian *et al.*

Claims 1-4 and 22 have been rejected as allegedly being anticipated by U.S. Patent No. 4,423,080 (Bedrosian *et al.*). This rejection is unwarranted, as well.

Bedrosian *et al.* discloses a controlled atmosphere container for retarding the ripening rate of fruits and vegetables, which is formed from the combination of a sealed

enclosure and a packet within the container that contains chemical agents capable of absorbing moisture and carbon dioxide from the interior of the container (see Abstract and claims). Bedrosian *et al.* does not teach or suggest the presently claimed method for maintaining a controlled level of oxygen within a closed food package wherein a cup-shaped package element is formed from a laminate of polymeric films having a selected oxygen permeability and having a ribbed surface to provide a sufficient surface area on the closed food package to maintain the partial pressure of oxygen in the package at a specified level. While Bedrosian *et al.* does discuss optimal levels of oxygen required to maintain fruits and vegetables in a fresh state and oxygen permeability of various materials, the reference does not teach or suggest a cup-shaped package having a ribbed surface to provide sufficient surface area to maintain the partial pressure of oxygen in the closed package at a selected level, as required by the present claims.

Since the applied reference does not teach or suggest all of the elements of the claims, the anticipation rejection is improper and should be withdrawn.

VIII. Claims 5 and 6 Are Not Obvious Over Jones in View of Brady.

Claims 5 and 6 have been rejected as allegedly being obvious over the combination of Jones in view of Brady. In order to establish a *prima facie* case for obviousness, all claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). Additionally, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970). Furthermore, there must be a teaching in the references themselves that would have motivated one of skill in the art at the time the invention was made to combine the references with a reasonable expectation of success. *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). That is not the case here. The various combinations of the applied references would not have rendered the present claims obvious to one of ordinary skill in the art at the time the claimed invention was made even if it is assumed, *arguendo*, that the attempted combinations are indeed proper. In addition, a *prima facie* case of obviousness can be rebutted by showing that the prior art teaches away from the claimed invention in any material respect. *In re Geisler*, 116 F.3d 1465, 1469, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997).

Claims 5 and 6 are directed to methods for maintaining a controlled level of oxygen

within a closed food package wherein a cup-shaped package element is formed from a laminate of polymeric films having a selected oxygen permeability and having a ribbed surface to provide a sufficient surface area on the closed food package to maintain the partial pressure of oxygen in the package at a specified level. Claims 5 and 6, which are dependent on claim 4, further include the limitation that the package include micropores to allow additional oxygen exchange between the interior and exterior of the package, the micropores being covered by a porous label material to control the degree of oxygen exchange.

While Jones discusses the use of micropores in a food container to allow oxygen diffusion, the method of controlling the oxygen level in a food container taught by Jones utilizes a totally different concept than the presently claimed methods. Jones teaches controlling the oxygen level *by changing the storage conditions of the container*. The combination of Jones with Brady does not teach or suggest the claimed method of controlling the oxygen level in a closed food package using a cup-shaped container constructed from a polymeric laminate material having a selected oxygen permeability characteristic in which the package has a ribbed surface to provide a sufficient surface area for gas diffusion, and further including micropores covered by a porous label, to maintain a desired oxygen level in the closed package.

Furthermore, the teaching of Brady with regard to expanded PP and expanded PE is related to the use of these materials by themselves as an oxygen permeable film, and not as a material to cover micropores in the surface of a sealed food package. The peelable portion of the food packages disclosed by Jones and Brady, however, are present to permanently increase the permeability characteristics of the package upon being peeled away.

One of ordinary skill in the art would not have been motivated to combine the teaching of Jones (controlling the oxygen level in a food container having a highly permeable lid and an impermeable container tray by temporarily placing the permeable lid against materials of lower permeability) with the teaching of Brady (providing a food container having a smooth, permeable bottom) to obtain the presently claimed invention. The concepts of controlling the oxygen level in a food container taught by Jones and Brady are totally different from the presently claimed methods.

The combined references do not teach or suggest all of the elements of the present claims, much less the invention as a whole. Accordingly, claims 5 and 6 are not obvious over

the combined applied art.

IX. Claims 28-30 and 35 Are Not Obvious Over Krebs *et al.* in View of Tomlinson.

Claims 28-30 and 35 have been rejected as allegedly being obvious over the combined teachings of Krebs *et al.* in view of Tomlinson (WO 99/62764).

As noted above, Krebs *et al.* is directed to food packaging trays comprising a gas impermeable tray sealed with gas permeable film, and having a gas impermeable film removably disposed over the permeable film (See col. 4, lines 27-38, and the figures). Tomlinson, on the other hand, is directed to methods of filling a plurality of individual-portion sized salad containers having a generally cup shape, and to packaged salads in individual-portion sized cup-shaped containers (see the claims and abstract). The containers used in the methods and packaged salads of Tomlinson are cup-shaped and have generally dome-shaped lids. However, Tomlinson does not teach or suggest the use of a ribbed surface or a polymeric laminate of selected oxygen permeability to control the oxygen level within a closed food package, much less the combination of these features. In fact, Tomlinson is completely silent with regard to the oxygen level inside the packaged salad container. There is no teaching or suggestion that there is any need to control the oxygen level in the container. On the contrary, the described method involves manually pushing or scooping salad into a plurality of open cups held in a tray-like holder, implying that the oxygen level in the container is ambient room oxygen level (see Summary of the Invention and Figures 12-14).

Krebs *et al.* is primarily focused on providing a controlled atmosphere container suitable for storage and display of fresh red meat. While Tomlinson makes a passing mention of meats, the reference is primarily concerned with providing a conveniently packaged, individually portioned salad, and efficient methods of packaging such salads (e.g., all of the claims are directed to salads and methods of packaging salads). Tomlinson makes no contribution to the art of controlling the atmosphere in a food package. The teachings of Tomlinson are completely unrelated to the teachings of Krebs *et al.* and one of skill in the art would not have been motivated to combine these teachings for any reason, much less to practice the methods of the present invention.

Even assuming, *arguendo*, that the references are combinable, the present claims are not obvious over the combination of Krebs *et al.* and Tomlinson, since the combination does not teach or suggest all of the elements of the claims. Accordingly, this rejection should be

withdrawn.

X. The Present Claims Are Not Obvious Over Antoon Jr. in View of Allers *et al.*

Claims 8, 23 and 24 have been rejected as allegedly being obvious over Antoon Jr. in view of Allers *et al.* (US 5,045,331). Since the limitations of cancelled claim 8 have been incorporated into claim 1, applicants will address rebuttal of this ground of rejection with regard to all of the present claims.

Antoon Jr. discloses a bowl-shaped container for storage of fruits and vegetables including a gas permeable panel to control the level of oxygen and carbon dioxide diffusion into and out of the container. The reference is directed to gas non-permeable containers having only a portion thereof permeable to oxygen and carbon dioxide to control the atmosphere in the container.

Allers *et al.* is directed to a container for housing a food dish (particularly a pie tin, see the Summary of the Invention, cols. 1 and 2). The container has a bowl-shaped lower portion and a truncated dome-type lid that can be integrally connected to the lower bowl in a clam-shell design (see the figures and Summary of the Invention, cols. 1 and 2). The embodiment in the figures includes ribs in the container wall to prevent lateral movement of the food dish in the container and to strengthen the container (see col. 1, lines 64-67). The reference does not address providing a controlled atmosphere within the container, other than reference to protection of the pie tin from air and moisture (col. 1, lines 49-50). In particular, the reference does not teach forming a package from a polymeric laminate of selected oxygen permeability characteristics as required by the present claims. Nor does the reference teach selecting the number and size of the ribs to provide sufficient surface area to maintain the partial pressure of oxygen in the closed food container at a desired level, as also required by the present claims.

Since the only teaching regarding controlled atmosphere in the two cited references is found in Antoon Jr., one of skill in the art might have been motivated to combine these references to add a gas permeable panel to the container of Allers *et al.* to achieve a controlled atmosphere container for pie tins. Likewise, one of skill in the art might have been motivated to combine these two references to provide a storage container for fruits and vegetables comprising a ribbed gas non-permeable bowl with a lid having a gas permeable panel, to add strength to the container of Antoon Jr. However, neither of these two combinations of the

Filed: August 2, 2001

references lead to the methods of the present invention. No combination of the applied references leads to a method for maintaining a controlled level of oxygen within a closed food package wherein a cup-shaped package element is formed from a laminate of polymeric films having a selected oxygen permeability and having a ribbed surface to provide a sufficient surface area on the closed food package to maintain the partial pressure of oxygen in the package at a specified level.

The conclusions regarding the result of combining these references in the Office Action can only be made with impermissible reference to the teachings of the present application. In particular, only the present application makes the necessary connection between the oxygen permeability characteristics of the polymeric laminate in combination with size and number of ribs to maintain the proper oxygen level in the container, and only the present application addresses a cup-shaped package, all of which are limitations of the present claims that are not taught or suggested by the combined references. Accordingly this ground for rejection is unwarranted and should be withdrawn.

XI. Provisional Obviousness-Type Double Patenting Rejections.

Applicants note that Claims 1-6, 19-31 and 33-35 have been provisionally rejected over claims 1-32 of co-pending, co-owned Application No. 09/924,314 under the doctrine of obviousness-type double patenting. Applicants note that there are significant differences in scope between the present claims and the currently pending claims of 09/924,314. However, should the 09/924,314 application issue as a patent while this provisional rejection is still in effect, the appropriate terminal disclaimer will be filed to obviate the rejection.

Claims 1, 3-6, 20, 25-26, 31 and 33 also have been provisionally rejected for obviousness-type double patenting over claims 45-53 of co-pending, co-owned Application No. 10/211,829. Again, there are significant differences in scope of the 10/211,829 claims and the currently pending claims of the present invention. However, should the 10/211,829 application issue as a patent while the present provisional rejection is still in force, an appropriate terminal disclaimer will be filed.

Filed: August 2, 2001

XII. Conclusion

None of the present claims are anticipated by the applied references. None of the present claims are obvious in view of the applied combinations of references. Accordingly, all of the present claims are patentable over the applied art.

Reconsideration and early allowance of all claims is solicited.

Respectfully submitted,

Dated: Sept. 19, 2003

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